



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FPICOT2226B Debark logs mechanically**

**Release: 1**

## **FPICOT2226B Debark logs mechanically**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit descriptor**

This unit describes the outcomes required to mechanically debark logs to a set diameter and length. The unit includes assessing logs for diameter, species, faults and moisture content

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

This unit replaces FPICOT2226A Debark logs mechanically

### **Application of the Unit**

#### **Application of the unit**

The unit involves debarking logs mechanically in a forest products factory setting

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

### **Pre-Requisites**

Not Applicable

## **Employability Skills Information**

**Employability skills**      This unit contains employability skills

## **Elements and Performance Criteria Pre-Content**

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for debarking	<p>1.1. Applicable <i>occupational health and safety</i> (OHS), <i>environmental</i>, <i>legislative</i> and <i>organisational requirements</i> relevant to debarking logs mechanically are identified and followed</p> <p>1.2. <i>Work order</i> is reviewed and clarified with <i>appropriate personnel</i></p> <p>1.3. Type and quantity of <i>logs</i> to be <i>debarked</i> are selected from the <i>storage location</i></p> <p>1.4. <i>Equipment</i> is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer recommendations</p> <p>1.5. Debarking process is planned in line with site procedures and environmental requirements</p> <p>1.6. <i>Communication</i> with others is established and maintained in line with OHS requirements</p>
2. Debark logs	<p>2.1. <i>Pre-startup checks</i> are carried out on equipment in line with site requirements</p> <p>2.2. Material is fed into the machine at the <i>feed rate</i> prescribed by organisational requirements</p> <p>2.3. Debarking process is maintained and adjusted to produce required quantity of logs and to maximise feed rate</p> <p>2.4. Debarking process and <i>conveyors</i> are regularly checked and adjusted to maintain desired quality and output</p> <p>2.5. Logs with <i>defects</i> are segregated, rejected and <i>disposed of</i> in line with site procedures and environmental requirements</p> <p>2.6. Debarking process and equipment faults are <i>recorded and reported</i> to the appropriate personnel</p> <p>2.7. Debarked logs are safely directed to storage in a designated location in line with work order</p>
3. Conduct operator maintenance	<p>3.1. Equipment lock-out procedures are followed in line with OHS legislation and site procedures</p> <p>3.2. Cutters are checked for blunt or damaged condition in line with site procedures</p> <p>3.3. Cutters are removed and replaced in line with manufacturer recommendations</p> <p>3.4. Blunt or damaged cutters are <i>dealt with</i> in line with</p>

**ELEMENT****PERFORMANCE CRITERIA**

- site procedures and environmental requirements
- 3.5. Machine area is kept clear of dust and debris in line with OHS and environmental requirements

**Required Skills and Knowledge****REQUIRED SKILLS AND KNOWLEDGE**

This describes the essential skills and knowledge and their level required for this unit.

**Required skills**

- Technical skills sufficient to use and maintain relevant tools, machinery and equipment; efficiently and safely debark logs mechanically
- Communication skills sufficient to use appropriate communication and interpersonal techniques with colleagues and others; locate, record and report information
- Literacy skills sufficient to follow legislation, regulations, standards, codes of practice and established safe practices and procedures for debarking logs mechanically
- Numeracy skills sufficient to measure, estimate and calculate time required to complete a task
- Problem solving skills sufficient to review and identify work requirements; identify problems and equipment faults; demonstrate appropriate response procedures

**Required knowledge**

- Applicable commonwealth, state or territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for debarking logs mechanically
- Environmental protection requirements, including the safe disposal of waste material, the safe use and storage of chemicals, and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for debarking logs mechanically
- Environmental risks and hazards
- Criteria for recycling and re-using timber with defects
- Using energy effectively and efficiently
- Debarking systems
- Characteristics of timber and timber defects
- Debarking processes, feed rates and finish
- Assessment criteria for cutter condition

**REQUIRED SKILLS AND KNOWLEDGE**

- Storage systems and labelling procedures
- Established communication channels and protocols
- Problem identification and resolution strategies, and common fault finding techniques
- Types of tools and equipment, and procedures for their use, operation and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

# Evidence Guide

## EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

### Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently mechanically debark logs in line with organisational requirements

### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to, and satisfy, all of the requirements of the elements of this unit and include demonstration of:

- following applicable commonwealth, state or territory legislative and regulatory requirements and codes of practice relevant to debarking logs mechanically
- following organisational policies and procedures relevant to debarking logs mechanically
- debarking logs mechanically in line with the work order and prescribed organisational specifications
- conducting operator maintenance on debarking equipment
- storing logs in line with organisational requirements and OHS regulations

### Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
  - workplace location or simulated workplace
  - materials and equipment relevant to undertaking work applicable to this unit
  - specifications and work instructions

### Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package

## EVIDENCE GUIDE

- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge
- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. **Italicised** wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**OHS requirements:** are to be in line with applicable commonwealth,



## RANGE STATEMENT

state or territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices, including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- legislation
- organisational policies and procedures
- workplace practices

**Environmental requirements**  
may include:

**Legislative requirements:**

are to be in line with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

**Organisational requirements**  
may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement processes and standards
- OHS, emergency and evacuation procedures

## RANGE STATEMENT

- ethical standards
  - recording and reporting requirements
  - equipment use, maintenance and storage requirements
  - environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
- Work order** is to include:
- instructions for debarking logs and despatching logs from the work site to downstream processing
- and may include:
- species
  - diameter
  - length
  - quantity
  - grade
  - instructions for the environmental monitoring of work and procedures
  - environmental care requirements relevant to the work
- Appropriate personnel** may include:
- supervisors
  - suppliers
  - clients
  - colleagues
  - managers
- Logs** are to include:
- assessment of diameter range
  - curvature
  - faults
  - species
  - moisture content
- Debarking** is the process of:
- forcing a log through a debarking machine which strips the log bare of its bark, making the log available for further downstream processing
  - outfeeding the bark for landscaping supplies
- Storage locations** may include:
- storage racks
  - storage bays
  - bins
  - stacks
  - pallet boxes
  - modularised storage components

## RANGE STATEMENT

- temporary stacking bays (stand, frame or ground)

and may be divided into:

- standard product classification
- product designation
- size
- dimension
- stack number
- weight
- grade
- shelf life
- stock rotation position

**Equipment** is to include:

- measuring equipment
- debarking plant
- procedures for machine lock-out, such as protecting operators and co-workers from accidental injury by isolating the machine from the power source

and may include:

- computer-automated systems
- automated storage-conveyor systems
- automated diameter and length sorting systems

**Communication** may include:

- verbal and non-verbal language
- constructive feedback
- active listening
- questioning to clarify and confirm understanding
- use of positive, confident and cooperative language
- use of language and concepts appropriate to individual social and cultural differences
- control of tone of voice

**Pre-startup checks**

are conducted to ensure:

- debarking plant has been set up correctly
- cutters are installed accurately
- machinery is operating to optimum performance

**Feed rate**

is the rate of speed the material is passed through

## RANGE STATEMENT

the machine affecting the sharpness of the cutters, the finish of the material, and the production output

**Conveyor** is to include:

- belts
- chutes or travelator methods of transporting logs to and from the debarker, which may be automated in conjunction with the log storage area

**Defects** may include:

- incorrect moisture content
- warp
- wane
- curvature
- shakes
- insect defects
- knots
- resin pockets

**Disposing of** may include:

- recycling timber with defects
- re-using timber with defects
- redirecting timber with defects for energy recovery

**Records and reports** may include:

- debarking system
- product type
- size
- inspection information
- grading and labelling outcomes
- storage locations
- quality outcomes
- hazards
- incidents
- equipment malfunctions

and may be:

- manual
- computer-based system
- other appropriate organisational communication system

**Dealing with** may include:

- repairing or sending to be repaired blunt or damaged cutters
- recycling blunt or damaged cutters that cannot be repaired
- sending blunt or damaged cutters that cannot

**RANGE STATEMENT**

be repaired to landfill

**Unit Sector(s)**

Not Applicable

**Competency field**

**Competency field**            Common Technical